

P1432 Epidemiology of meningitis in Italy: preliminary results of a prospective observational study, the MeningItaly project

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Background: Recently, a cluster of 61 invasive meningococcal diseases has been described in Tuscany, Italy; mortality was 21.3%. Bacterial meningitis (BM) and related invasive diseases (IBD) are still severe diseases with high incidence of morbidity and mortality. The aim of the "MeningItaly" project is to describe epidemiology, risk factors, antimicrobial and adjunctive therapies of BM and IBD. This is a preliminary epidemiological report.

Materials/methods: We prospectively evaluated all patients with BM and/or IBD admitted to 7 different Italian Infectious Diseases clinics from August 2017 to October 2018. Hospitals are different in size and located in the whole country. Demographic, clinical and microbiological data were collected by an *ad hoc* online case report form.

Results: Eighty patients were enrolled, 38/80 (47.5%) were male and median age was 50.5 years (IQR 13-64); 21/80 (26.3%) patients were paediatrics (aged ≤ 14 years) and 4/80 (5%) are under 1. *Streptococcus pneumoniae* was the etiologic agent in 38/80 (47.5%) patients, while meningococci in 24/80 (30%) patients (5 serogroup B, 7 serogroup C, 10 serogroup Y, 1 serogroup W135). Overall mortality was 15% (12/80); mortality in pneumococcal and meningococcal infections was 6/38 (15.8%) and 5/24 (20.8%), respectively. Sequelae were described in 20.4% of patients. Seventy out of 75 (96%) patients received steroids (dosage was adequate in 57/70 patients, 81.5%) while IgM-enriched immunoglobulins were administered in 39/75 (52%) patients.

Conclusions: *Streptococcus pneumoniae* still resulted the most frequent etiologic agent of BM and IBD. *Neisseria meningitidis* tends to have a higher mortality (20.8% vs 15.8%, $p > 0.1$). More data are required to evaluate the effect of *N. meningitidis* serogroups and adjunctive therapy on mortality.

